

**DEPARTMENT OF THE ARMY
CORPS OF ENGINEER (ACOE) PERMIT**

December 2001

FOR THE

**San Francisco-Oakland Bay Bridge East Span
Seismic Safety Project**



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

DEC 04 2001

Regulatory Branch

SUBJECT: File Number 23013S

Mr. H. Paul Hensley
California Department of Transportation
Toll Bridge Program
111 Grand Avenue (P.O. Box 23660)
Oakland, California 94623-0660

Dear Mr. Hensley:

Enclosed is your signed copy of a Department of the Army permit (Enclosure 1) to replace the East Span of the San Francisco-Oakland Bay Bridge on Interstate 80 Between Yerba Buena Island and the City of Oakland in San Francisco and Alameda Counties.

Please complete the appropriate parts of "Notice to Permittee" form (Enclosure 2), and return it to this office. You are responsible for ensuring that the contractor and workers executing the activity authorized herein are knowledgeable with the terms and conditions of this authorization.

Should you have any questions regarding this matter, please call Bob Smith of our Regulatory Branch at 415-977-8450. Please address all correspondence to the Regulatory Branch and refer to the file number at the head of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy S. O'Rourke", is written over the typed name.

Timothy S. O'Rourke
Lieutenant Colonel, Corps of Engineers
District Engineer

Enclosures

Copy Furnished (w/encl 1 only):

US EPA, San Francisco, CA

US FWS, Sacramento, CA
US NMFS, Santa Rosa, CA
CA RWQCB, Oakland, CA
CA DFG, Yountville, CA
CA BCDC, San Francisco, CA

NOTICE TO PERMITTEE

Please use the forms below to report the dates when you start and finish the work authorized by the enclosed permit. Also if you suspend work for an extended period of time, use the forms below to report the dates you suspended and resumed work. The second copy is for your records. If you find that you cannot complete the work within the time granted by the permit, please apply for a time extension at least one month before your permit expires. If you materially change the plan or scope of the work, it will be necessary for you to submit new drawings and a request for a modification of your permit.

(cut out as needed) -----

Date: _____

NOTICE OF COMPLETION OF WORK under Department of the Army permit No. -023013-0S

TO: District Engineer, US Army Corps of Engineers, Regulatory Branch, 333 Market Street, 8th Floor, San Francisco, CA 94105-2197

In compliance with the conditions of the permit dated November 30, 2001 to replace the East Span of the San Francisco-Oakland Bay Bridge this is to notify you that the work was completed on _____.

Permittee: California Department of Transportation H. Paul Hensley

Address: Toll Bridge Program 111 Grand Avenue (P.O. Box 23660) Oakland, CA 94623-0660

Date: _____

NOTICE OF RESUMPTION OF WORK under Department of the Army permit No. -023013-0S

TO: District Engineer, US Army Corps of Engineers, Regulatory Branch, 333 Market Street, 8th Floor, San Francisco, CA 94105-2197

In compliance with the conditions of the permit dated November 30, 2001 to replace the East Span of the San Francisco-Oakland Bay Bridge this is to notify you that work was resumed on _____.

Permittee: California Department of Transportation H. Paul Hensley

Address: Toll Bridge Program 111 Grand Avenue (P.O. Box 23660) 10 Oakland, CA 94623-0660

Date: _____

NOTICE OF SUSPENSION OF WORK under Department of the Army permit No. -023013-0S

TO: District Engineer, US Army Corps of Engineers, Regulatory Branch, 333 Market Street, 8th Floor, San Francisco, CA 94105-2197

In compliance with the conditions of the permit dated November 30, 2001 to replace the East Span of the San Francisco-Oakland Bay Bridge this is to notify you that work was suspended on _____.

Permittee: California Department of Transportation H. Paul Hensley

Address: Toll Bridge Program 111 Grand Avenue (P.O. Box 23660) Oakland, CA 94623-0660

Date: _____

NOTICE OF COMMENCEMENT OF WORK under Department of the Army permit No. -023013-0S

TO: District Engineer, US Army Corps of Engineers, Regulatory Branch, 333 Market Street, 8th Floor, San Francisco, CA 94105-2197

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DEPARTMENT OF THE ARMY PERMIT

Permittee: **California Department of Transportation, District 4**

Permit No.: **23013S**

Issuing Office: **San Francisco District**

NOTE. The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

You are hereby authorized to: Dredge approximately 217,000 cubic yards (cy) for a construction access channel & approximately 191,000 cy for a demolition access channel; Discharge approximately 617,000 cy of dredged material in accordance with Dredge Material Management Office recommendations (Material from the upper 3.66 meters (12 feet) of Piers E1 through E6, and E15 through E18 shall be disposed of at an appropriate upland facility); Construct a barge dock in Clipper Cove on Yerba Buena Island; Discharge approximately 1.67 acres of fill to construct pile caps E3 to E16; Discharge approximately 0.60 acre of fill to construct pile caps E-17 to E 23; Construct 1,970 linear feet of geotube at the Oakland Touchdown; Fill approximately 2.63 acres of the Bay at the Oakland touchdown; Discharge fill to modify and/or construct seven outfalls at the Oakland touchdown & four outfalls at Yerba Buena Island. Work shall be carried out in accordance with the attached plans and drawings labeled: "San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, IN COUNTIES OF: San Francisco and Alameda, APPLICATION BY: Caltrans District 4, Date: November 2000" in 13 sheets.

Project Location:

The project is located in San Francisco Bay between the City of San Francisco and the City of Oakland.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **January 1, 2012**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space

provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

7. You understand and agree that, if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expenses to the United States. No claim shall be made against the United States on account of any such removal or alteration.

Special Conditions:

1. The permittee shall comply with the terms and conditions of the Biological Opinions issued by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act.

2. Mitigation shall be carried out in accordance with the "Conceptual Mitigation Plan for Special Aquatic Sites" prepared by Caltrans, dated November 2001 and subsequent Corps approved revisions.

3. Caltrans shall provide the Corps with plans and drawings of the proposed Clipper Cove barge dock and the drainage outfalls to be located on Yerba Buena Island and at the Oakland touchdown prior to construction.

(continued on page 4)

Further Information:

Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.


b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.


Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

 _____
(Date) 12/04/01

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below

 _____
(District Engineer) Timothy S. O'Rourke
LTC, EN (Date) 12/04/01

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee) (Date)

4. In order to reduce dredging impacts to coho salmon, chinook salmon, and steelhead the permittee shall comply with the terms and conditions of Biological Opinion, No. 151422-SWR99-SR-190, issued by the National Marine Fisheries Service on October 30, 2001.
5. In order to reduce impacts to Pacific herring, no dredging shall occur during the peak of the spawning season (December 1 to March 1) or as determined by the California department of Fish and Game.
6. Caltrans shall develop and implement an eelgrass research plan including, but not limited to
 - a. Surveying potential areas of eelgrass beds in San Francisco Bay to understand their distribution and densities
 - b. Developing the methodologies needed to effectively restore, enhance, or create new eelgrass beds.
 - c. Designing appropriate studies, such as limiting factors analysis, to define critical parameters for successful eelgrass establishment.
 - d. Designing and locating site-specific eelgrass establishment pilot for future implementation and testing
 - e. Preparing a report and guidelines for implementing eelgrass replacement activities, suitable for use throughout San Francisco Bay.

DREDGING SPECIAL CONDITIONS

1. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.
2. You must have a copy of this permit available on the vessel used for the authorized transportation and disposal of dredged material.
3. You must advise this office in writing, at least two weeks before you start maintenance dredging activities under the authorization of this permit.
4. You must install and maintain, at your expense, any safety lights and signals prescribed by the United States Coast Guard (USCG), through regulations or otherwise on your authorized facilities. The USCG may be reached at the address and telephone numbers listed below.
5. To provide notification to the maritime community of activities affecting navigation, the permittee shall provide in writing to the addresses below the following information at least two weeks before commencing work:
 - a. Name and telephone number of the project manager.
 - b. Size and placement of any floating construction equipment.
 - c. Radio telephone frequencies and call signs of any marine equipment.
 - d. Work start and completion dates.

Commander (oan)
 11th Coast Guard District
 Coast Guard Island, Bldg 50-6
 Alameda, California 94501-5100
 POC:
 Operations Officer
 Aids to Navigation Section
 PH: 510-437-2969
 FAX: 510-437-5836

Commander (mso)
 11th Coast Guard District
 Coast Guard Island, Bldg 50-6
 Alameda, California 94501-5100
 POC:
 Captain of the Port
 Waterways Section
 PH: 510-437-2770
 FAX: 510-437-3702

6. The Coast Guard Captain of the Port of San Francisco Bay may require modifications to marine construction equipment deployment or mooring systems to safeguard navigation while work is in progress.
7. All vessels operated for disposal of dredged material are required to participate in the Coast Guard's Vessel Traffic Control Service (VTS). Five minutes before each departure, the permittee shall notify the VTS by radio, via Channel 14, of the following: The name of vessel; time of departure from dredge site; and time of departure from disposal site.

8. When utilizing the Alcatraz Disposal Site (SF-11), the permittee shall dispose of all dredged material within a circular area of radius 1000 feet with center located at latitude 37°49'17"N; longitude 122°25'23"W. The specific location within the disposal area will be determined by the District Engineer upon receipt of the Dredging Operation Plan.

9. The permittee shall submit the following reports for review and comment to:

U.S. Army Corps of Engineers, San Francisco District
Chief, Operations and Readiness Division
ATTN: Regulatory Branch, Suite 812
333 Market Street
San Francisco, California 94105-2197,

a. **Dredge Material Analysis:** Submit, for approval, no earlier than 60 days prior to proposed commencement of any authorized successive dredging episodes, dredge material analysis (Chemical and Physical), sampling and testing information. **Please include the Corps permit number and dredge episode number with this submittal.** Also submit Regional Water Quality Control Board water quality certification or waiver for disposal of the material. For each dredging episode, the permittee shall obtain the approval of the District Engineer for formulating specific sediment testing procedures for the Dredge Material Analysis.

The testing protocol for disposal site SF-11 will be in accordance with the testing guidelines as published in the Corps and U.S. Environmental Protection Agency publication entitled, "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual" (The Inland Testing Manual or ITM), dated February 1998, and subsequent amendments thereto.

The testing protocol for disposal at SF-DODS will be in accordance with the testing guidelines as published in the Corps and U.S. Environmental Protection Agency publication entitled, "Evaluation of Dredged Material Proposed for Ocean Disposal" (The Green Book), dated February 1991, and subsequent amendments thereto.

b. **Dredging Operation Plan:** Submit, for approval by this office, no earlier than 60 calendar days and no later than 20 calendar days before the proposed commencement of dredging, a plan which includes the following: **Corps permit number, dredge episode number**, a copy of the dredging contract or description of the work under which the contractor will do the permitted work; name and telephone numbers of the dredging contractor's representative on site; dredging start and completion dates; names of vessel; dump scow numbers or identification; bin or barge capacities; identification of work as either maintenance dredging or new dredging; discussion of proposed dredging procedures, as governed under Special Condition No. 10, with detailed drawings or specifications of the grid or centrifugal pump system; quantity of material to be removed; dredging design depth and typical cross section including overdepth; and date of last dredging episode and design depth. The dredging Operational Plan shall also provide the following information:

- 1) The controls being established to insure that dredging operations occur within the limits defined by the channel dimensions and typical channel section. The horizontal and vertical positioning systems being utilized must be indicated as noted in No.9.b.3) below.
- 2) The controls being established to insure that disposal of the dredged material at the disposal site is at the assigned location and depth. The horizontal and vertical positioning systems being utilized must be indicated as noted in No.9.b.3) below.
- 3) Method of determining electronic positioning of dredge or dump scow during entire dredging operation at dredge site, disposal site and en route to and from disposal site.

Please note that failure to provide all of the above information may result in delays to your project. When your dredge operation plan has been approved, you will receive a written authorization to commence with your project.

c. **Before Dredging Survey:** Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of dredging, a survey with accuracy to one-tenth foot that delineates the following: areas to be dredged with overdepth allowances; existing depths; estimated quantities to be dredged for the project; and estimated quantities for overdepth. All surveys shall be signed by the permittee to certify their accuracy. **Please include the Corps permit number and dredge episode number.**

Please note that failure to provide all the above information may result in delays to your project.

d. **Solid Debris Management Plan:** Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of work, a plan which describes measures to ensure that solid debris generated during any authorized demolition or construction operation is retained and properly disposed of in areas not under Corps jurisdiction. At a minimum, the plan shall include the following: source and expected type of debris; debris retrieval method; **Corps permit number and dredge episode number**; disposal method and site; schedule of disposal operations; and debris containment method to be used, if floatable debris is involved.

Please note that failure to provide all the above information may result in delays to your project.

e. **Disposal Site Verification Log (DSVL):** Submit on a weekly basis by noon Monday, the log which enumerates work accomplished during the preceding week to:

U.S. Army Corps of Engineers, San Francisco District
Chief Operations and Readiness Division
ATTN: Mr. David Dwinell, DMMO, Suite 809
333 Market Street
San Francisco, California 94105-2197

or FAX (415) 977-8495, or e-mail to david.l.dwinell@usace.army.mil. **Please include the Corps permit number and dredge episode number.** The log will be provided when the Corps approves the Dredge Operation Plan and authorizes the commencement of the dredging. The DSVL form may also be downloaded from <http://www.spn.usace.army.mil/conops/forms/dsvsl.pdf>

f. **Overflow requirements:**

1. No overflow or decant water shall be discharged from the barge, with the exception of spillage incidental to clamshell dredge operations.
2. During transportation from the dredging site to the disposal site, no material shall be permitted to overflow, leak or spill from barge, bins or dump scows.
3. During dredging operations, overflow shall be limited to a maximum of 15 minutes for hopper dredge only. Adjustments to the dredging operation may be required to insure that once overflow commences, it will not exceed the 15 minute limit.
4. In approved sand dredging, overflow will not exceed 15 minutes or the economic load, whichever occurs first.

g. **Post Dredging Survey:** Submit, within 15 days of the last disposal activity (last is defined as that activity after which no further activity occurs for 15 calendar days), a survey with accuracy to one-tenth foot which delineates the areas dredged and the dredged depths. **Also, include the Corps permit number, dredge episode number, dates of dredging commencement and completion, actual quantities dredged for the project, and actual quantities of overdepth.** The permittee shall substantiate the total quantity dredged by including calculations used to determine the volume difference (in cubic yards) between the Before and Post Dredging Surveys and explain any variation in quantities greater than 15% beyond estimated quantities. **All surveys shall be accomplished by a licensed surveyor and signed by the permittee to certify their accuracy.** A copy of the post dredge survey should be sent to the National Ocean Service for chart updating:

NOAA/National Ocean Service
Nautical Data Branch
N/CS26, SSMC3, Room 7230
1315 East-West Highway
Silver Spring, Maryland 20910-3282.

10. The permittee shall ensure that all dredged material is slurried prior to disposal to prevent any accumulation or build up of material at the disposal site. All dredged material shall be slurried in one of the following manners:

- a. Dredged material will be either pumped with a centrifugal pump prior to leaving the dredge site for the disposal site; or,
- b. If the material is clamshell dredged, passed through a debris grid, with a maximum opening size of 12 inches by 12 inches that will cover the entire loading area of the dump scow. Everything that does not pass through the grid will be considered solid debris and shall be disposed of in areas outside of Corps jurisdiction. All such material shall be promptly removed from the grid at the end of each 8 hour shift or sooner.

11. The permittee or dredge contractor shall inform this office when a dredge episode actually commences, is suspended (suspension is when the dredge contractor leaves the dredge site for more than 48 hours for reasons other than equipment maintenance), is restarted, and the actual date of completion. Each notification should include the Corps permit number and dredge episode number. The information can be sent, to the attention Mr. Jim Delorey, in writing to the address below; or Faxed to (415) 977-8495; e-mailed to james.r.delorey@usace.army.mil or via telephone message at (415) 977-8441.

USACE, San Francisco District
Chief, Operations and Readiness Division
ATTN: Regulatory Branch, Suite 812
333 Market Street
San Francisco, California 94105-2197

12. The permittee, as directed by the District Engineer under authority pursuant to the policies and procedures of 33 CFR 325.7, may be required to modify disposal schedules and monthly disposal quantities for particular dredging episodes.

13. The permittee shall allow the dredging area and equipment to be inspected by the Corps staff upon request.

14. Transportation of dredged material to the SF-DODS shall only be allowed when weather and sea state conditions will not interfere with safe transportation and will not create risk of spillage, leak or other loss of dredged material in transit to the SF-DODS. No disposal vessel trips shall be initiated when the National Weather Service has issued a gale warning for local waters during the time period necessary to complete dumping operations, or when wave heights are 16 feet or greater. The permittee must consult the most current version of the SMMP Implementation Manual for additional restrictions and/or clarifications regarding other sea state parameters, including, but not limited to wave period.

15. All vessels used for dredged material transportation and disposal must be loaded to no more than 80 percent by volume of the vessel. Before any disposal vessel departs for the SF-DODS, an independent quality control inspector must certify in writing that the vessel meets the conditions and requirements of a certification checklist that contains all of the substantive elements found in the example contained in the most current SMMP Implementation Manual. "Independent" means not an employee of the permittee or dredging contractor.

16. Disposal vessels in transit to and from the SF-DODS should remain at least three nautical miles from the Farallon Islands whenever possible. Closer approaches should occur only in situations where the designated vessel traffic lane enters the area encompassed by the 3-mile limit, and where safety may be compromised by staying outside of the 3-mile limit. In no case may disposal vessels leave the designated vessel traffic lane.

17. When dredged material is discharged within the SF-DODS, no portion of the vessel from which the materials are to be released (e.g. hopper dredge or towed barge) can be further than 1,960 feet (600 meters) from the center of the target area at latitude 37°39'N; longitude 123°29'W.

18. No more than one disposal vessel may be present within the permissible dumping target area referred to in 17 at any time.

19. Disposal vessels shall use an appropriate navigation system capable of indicating the position of the vessel carrying dredged material (for example, a hopper dredge vessel or towed barge) with a minimum accuracy and precision of 100 feet during all disposal operations. The system must also indicate the opening and closing of the doors of the vessel carrying the dredged material. If the positioning system fails, all disposal operations must cease until the navigational capabilities are restored. The back-up navigation system, with all the capabilities listed in this condition, must be in place on the vessel carrying the dredged material.

20. The permittee shall maintain daily records (using the attached Scow Certification Checklist form) of the amount of material dredged and loaded into barges for disposal, the times that disposal vessel(s) depart for, arrive at and return from the SF-DODS, the exact locations and times of disposal, and the volumes of material disposed at the SF-DODS during each vessel trip. The permittee shall further record wind and sea state observations at hourly intervals during transit.

21. For each disposal vessel trip, the permittee shall maintain a computer printout from a Global Positioning System or other acceptable navigation system showing transit routes and disposal coordinates, including the time and position of the disposal vessel when dumping was commenced and completed.

22. An independent quality control inspector (as defined in 15) shall observe all dredging and disposal operations. The inspector shall verify the information required in conditions 20 and 21. The inspector shall promptly inform permittees of any inaccuracies or discrepancies concerning this information and shall prepare summary reports, which summarize all such inaccuracies and discrepancies at a minimum on a quarterly basis, and at project completion.

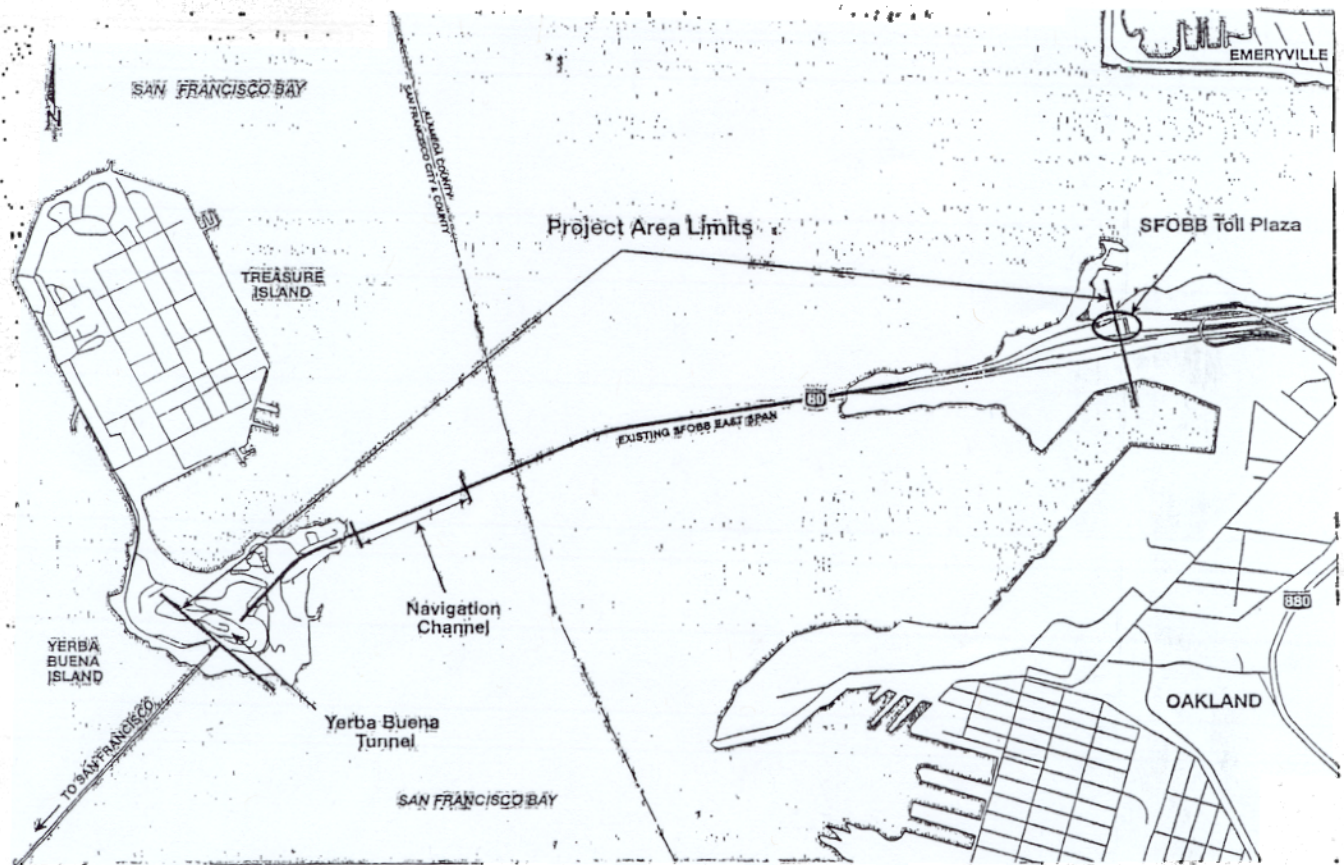
23. The permittee shall report any anticipated or actual permit violations to the District engineer and the Regional

Administrator within 24 hours of discovering such violation. If any anticipated or actual permit violations occur within the Gulf of the Farallones or the Monterey Bay National marine Sanctuaries, the permittee must also report any such violation to the respective Sanctuary Manager within 24 hours. In addition, the permittee shall prepare and submit reports, certified accurate by the independent quality control inspector, on a weekly basis by noon Monday, to the District Engineer and the Regional Administrator setting forth the information required by conditions 20 and 21.

24. Permittees must make arrangements for independent observers to be present on disposal vessels for the purpose of conducting shipboard surveys of seabirds and marine mammals. Observers shall employ standardized monitoring protocols, as referenced in the most current SMMP Implementation Manual. At a minimum, permittees shall ensure that independent observers are present on at least one disposal trip during each calendar month that disposal occurs, and on average at least once every 25 vessel trips to the SF-DODS.

25. At the completion of short-term dredging projects, at least annually for ongoing projects, and at any other time or interval requested by the District Engineer or Regional Administrator, permittees shall prepare and submit to the District Engineer and Regional Administrator a report that includes complete records of all dredging, transport and disposal activities, such as navigation logs, disposal coordinates, scow certification checklists, and other information required by permit conditions. Electronic data submittals may be required to conform to a format specified by the agencies. Permittees shall include a report indicating whether any dredged material was dredged outside the areas authorized for dredging or was dredged deeper than authorized for dredging by their permits.

DATE: November 2000



PURPOSE:

Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:

See Block 11

Figure 2

PROJECT AREA LIMITS

Caltrans District 4
District 4

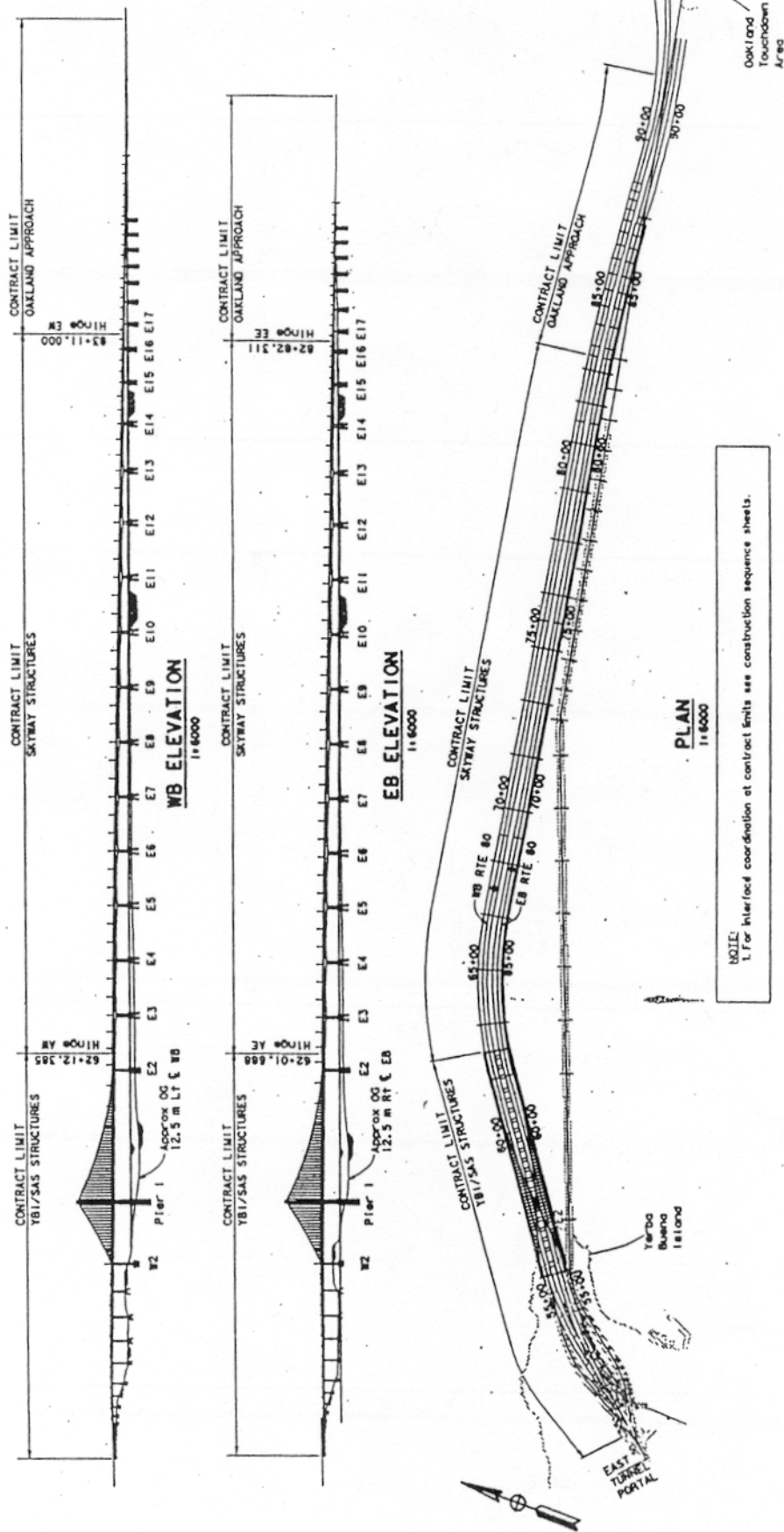
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

DATE: November 2000



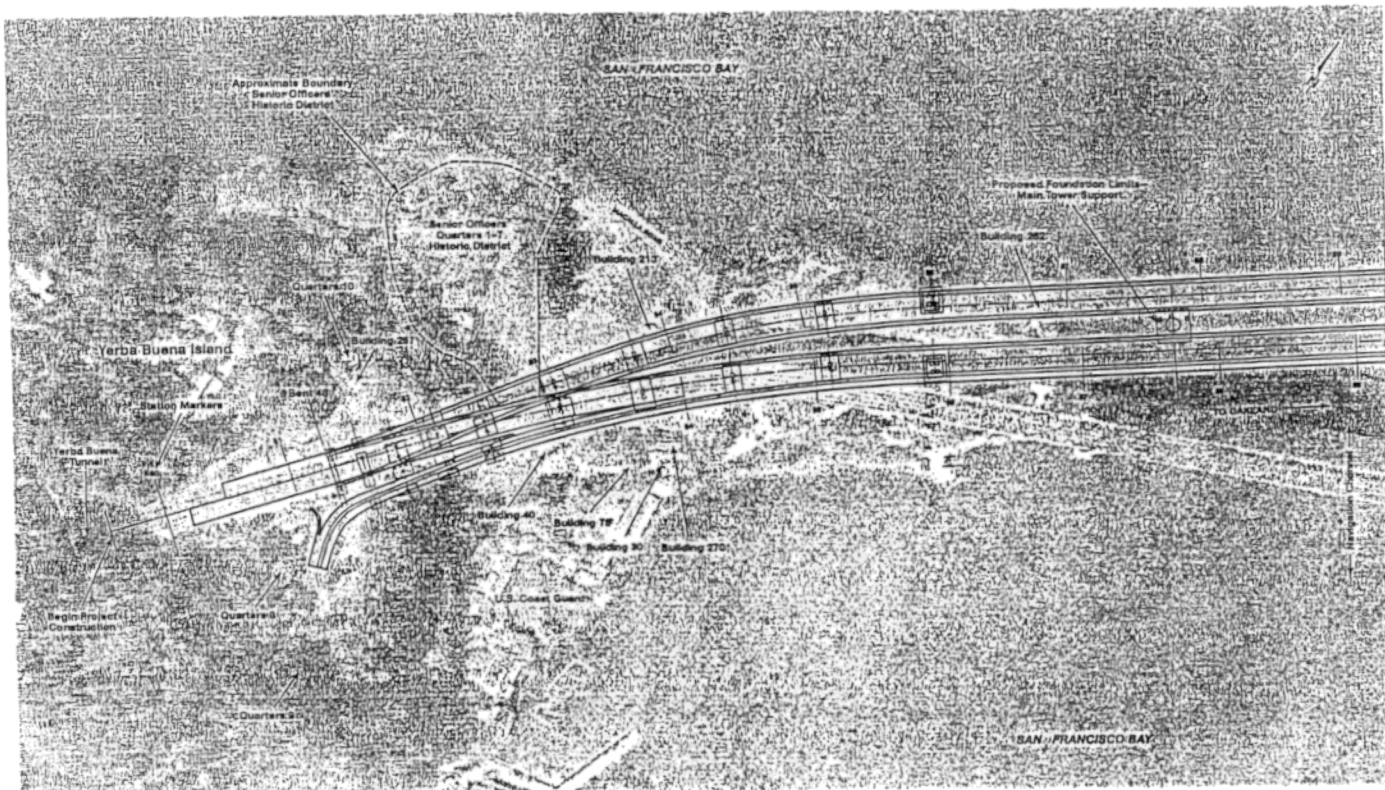
supplies

New Bridge General Plan

No Scale

| | | | | | |
|---|------------------------------|----------------------------|--|---|----------|
| Proposed San Francisco-Oakland Bay Bridge East Span Replacement | Name of Applicant - Caltrans | Wayway - San Francisco Bay | SF PM 7:6-8.7, Alam. PM 0:0-1.3 SF KP 12:2-14.3, Alam. KP 0:0-2.1 | Location - San Francisco, San Francisco Co Oakland, Alameda County, CA | May 2001 |
|---|------------------------------|----------------------------|--|---|----------|

FIGURE 3



PURPOSE:

Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:
See Block 11

Figure 4-1

CONCEPTUAL N-6 ALIGNMENT

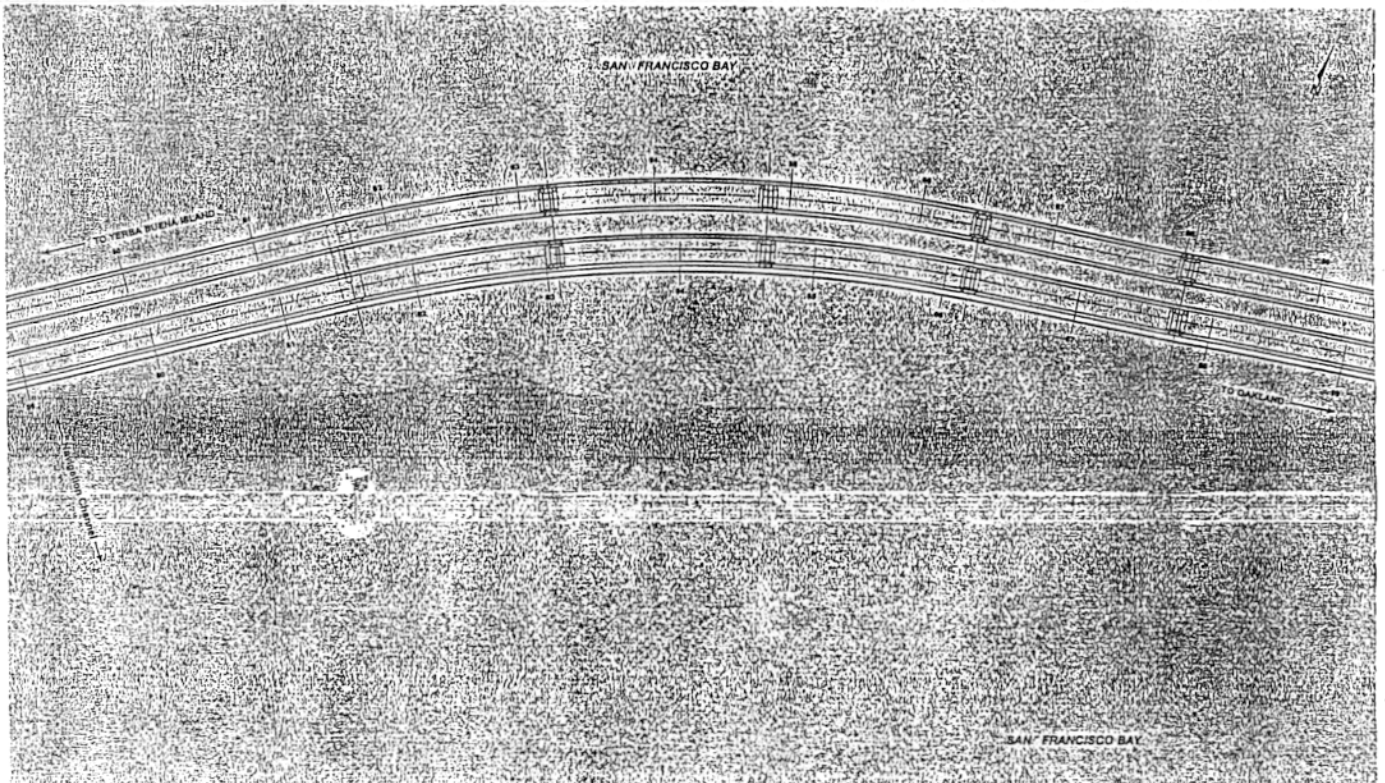
Caltrans District 4
District 4
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

DATE: November 2000



PURPOSE:

Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:
See Block 11

Figure 4-2

CONCEPTUAL N-6 ALIGNMENT

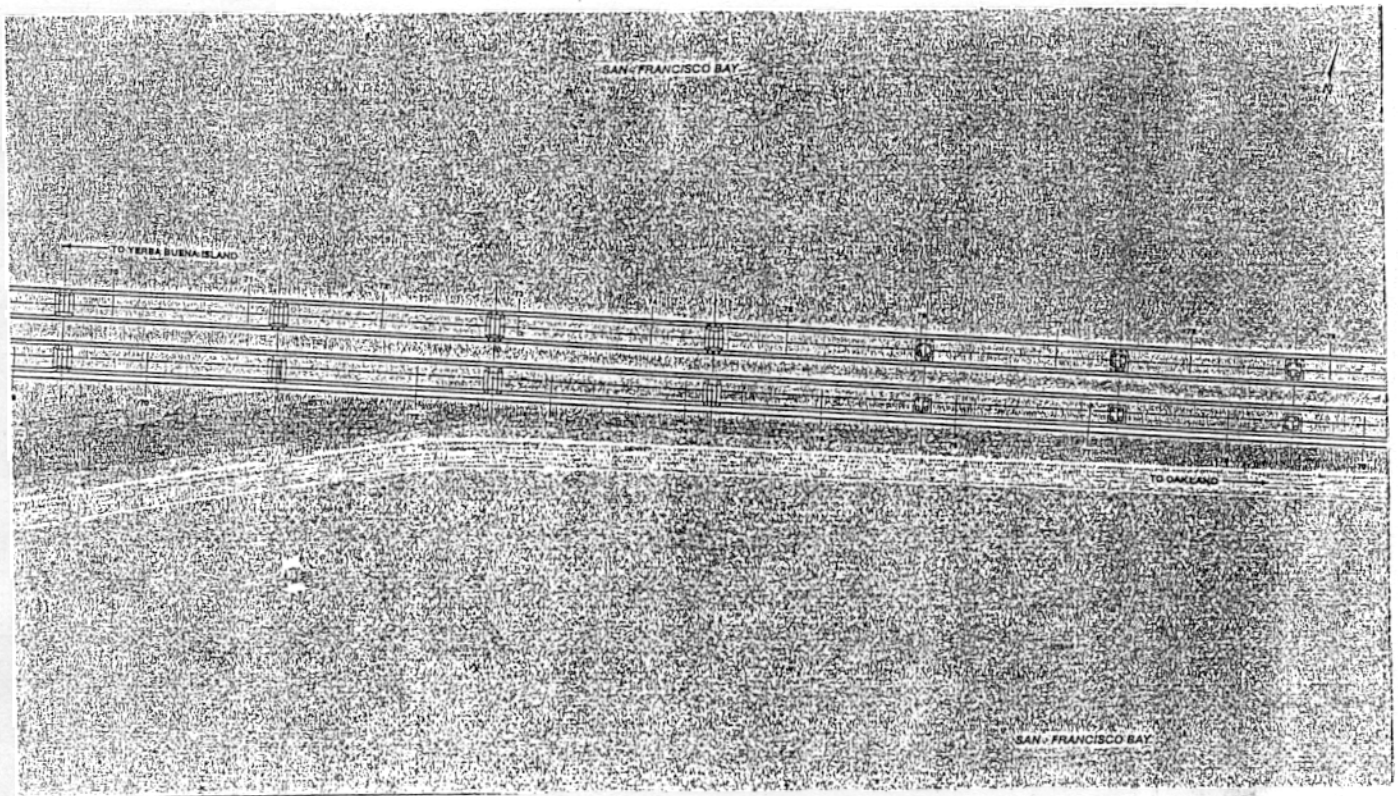
Caltrans District 4
District 4
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

DATE: November 2000



PURPOSE:
Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:
See Block 11

Figure 4-3

CONCEPTUAL N-6 ALIGNMENT

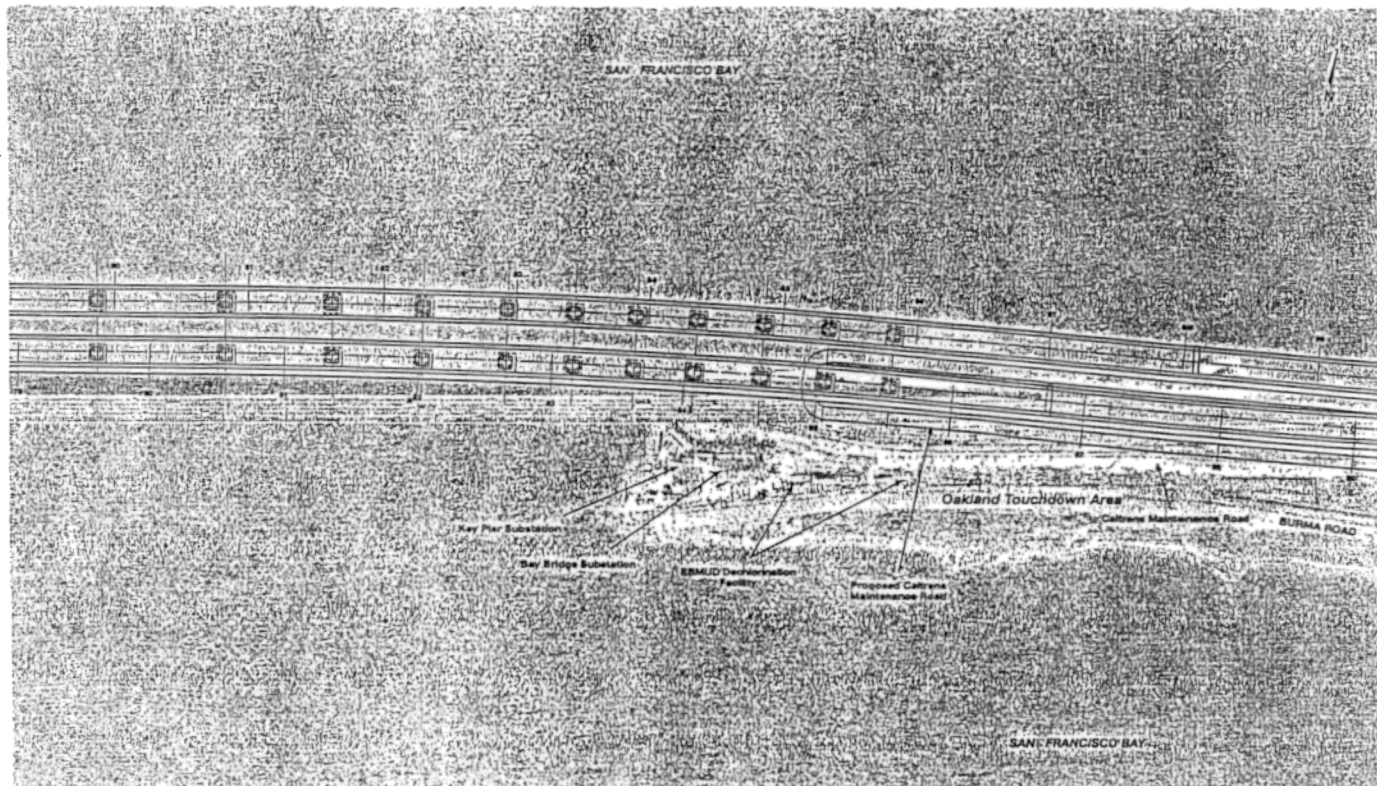
Caltrans District 4
District 4
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

DATE: November 2000



PURPOSE:

Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:
See Block 11

Figure 4-4

CONCEPTUAL N-6 ALIGNMENT

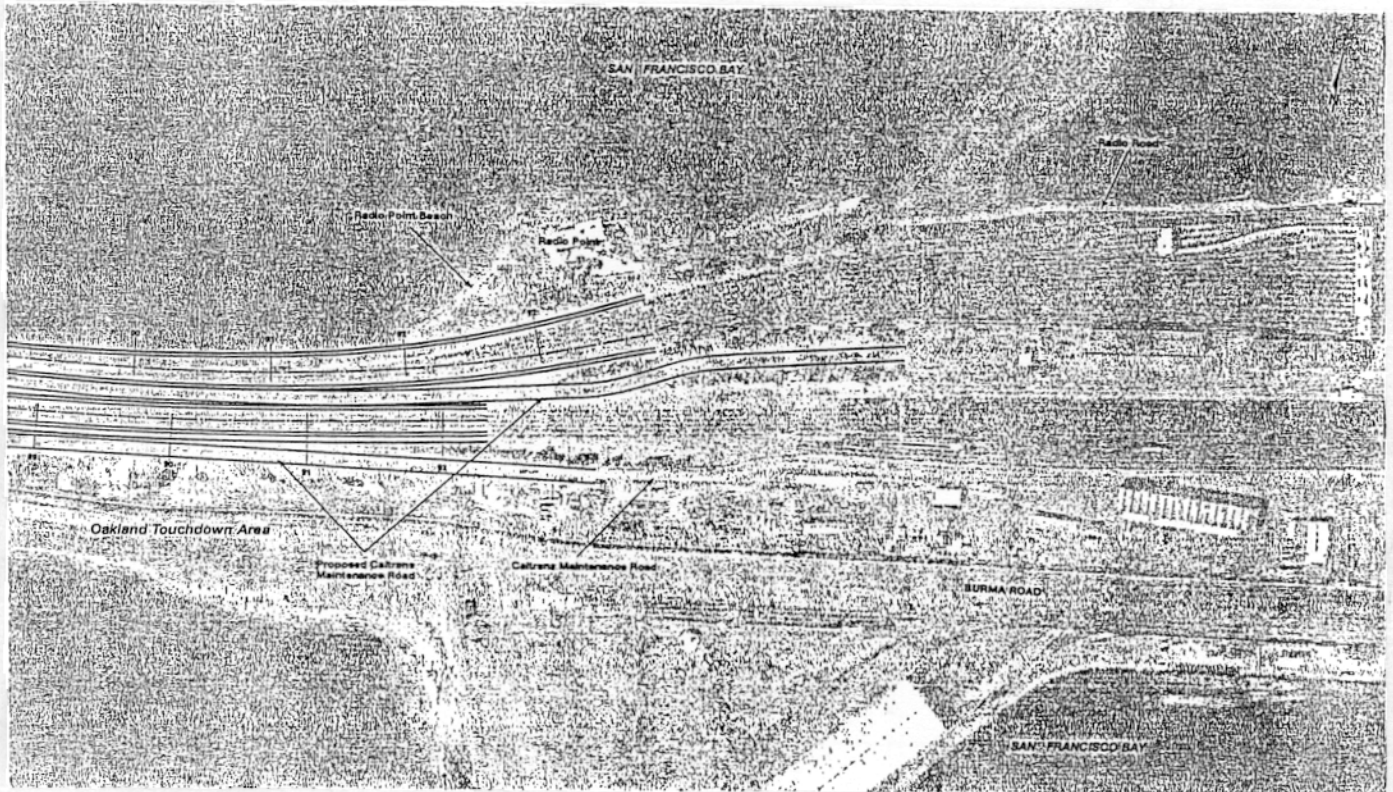
Caltrans District 4
District 4
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

DATE: November 2000



PURPOSE:

Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:
See Block 11

Figure 4-5

CONCEPTUAL N-6 ALIGNMENT

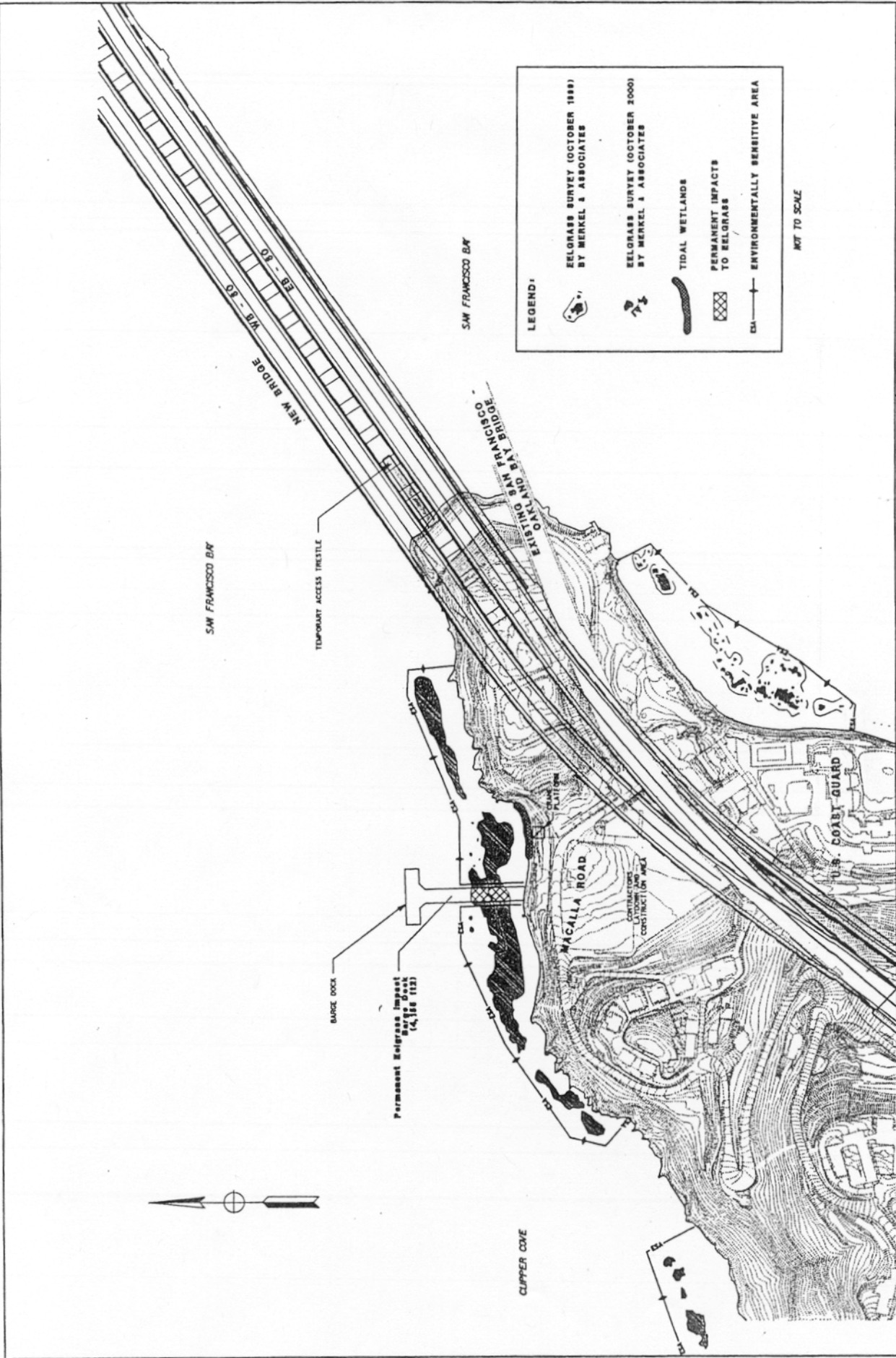
Caltrans District 4
District 4
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

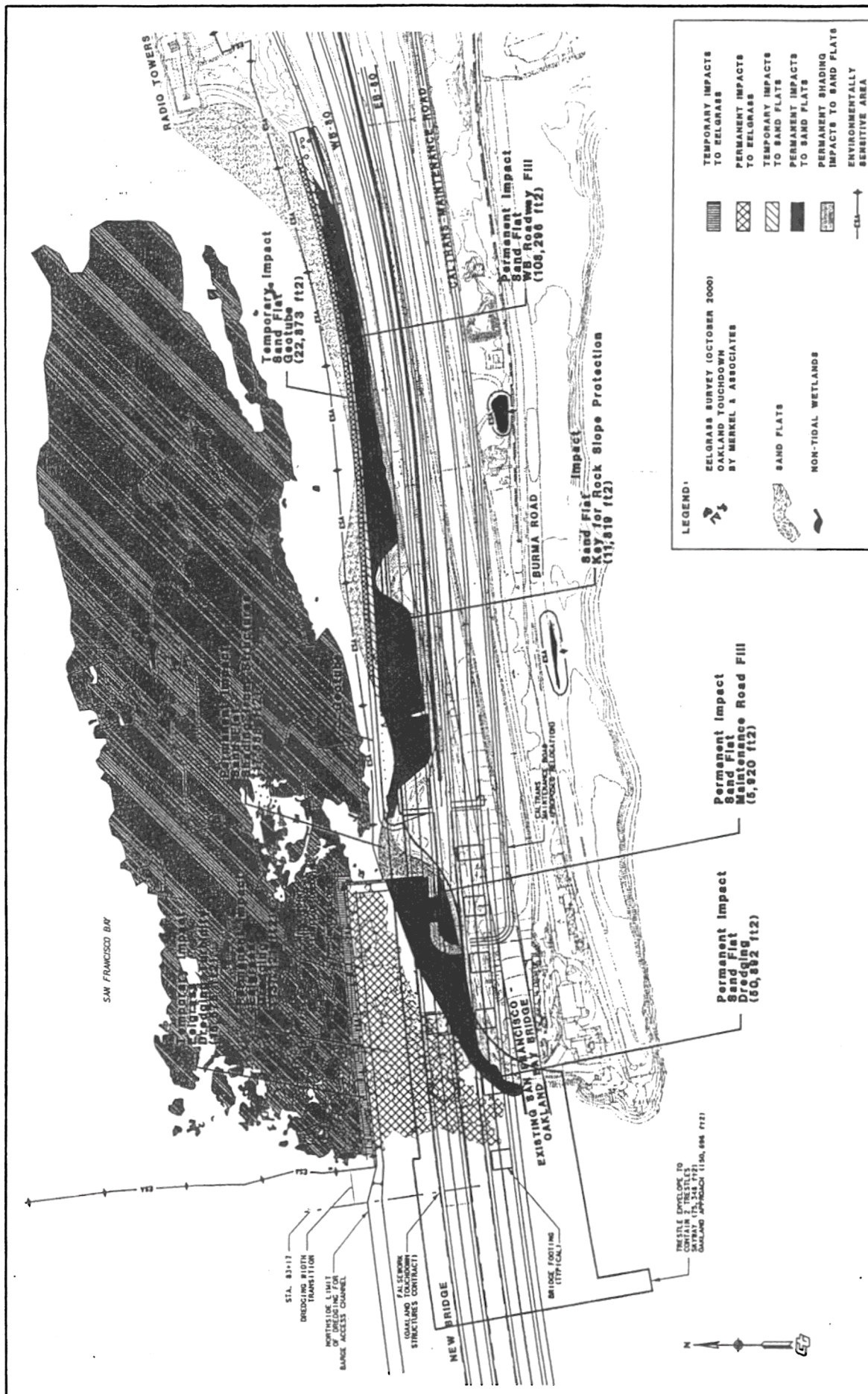
DATE: November 2000



IMPACTS ANALYSIS SPECIAL AQUATIC SITES YERBA BUENA ISLAND

San Francisco - Oakland Bay Bridge East
Span Seismic Safety Project
IN COUNTIES OF: San Francisco and Alameda
APPLICATION BY: Caltrans District 4
DATE: October 2001

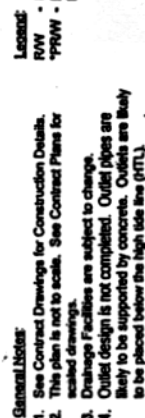
PURPOSE:
Provide a seismically upgraded
vehicular connection between
YBI and Oakland for future users
DATUM: Mean Sea Level NAD 83
ADJACENT PROPERTY OWNERS:
See Block 11



PURPOSE:
Provide a seismically upgraded vehicular connection between YBI and Oakland for future users
DATUM: Mean Sea Level NAD 83
ADJACENT PROPERTY OWNERS:
See Block 11

IMPACTS ANALYSIS SPECIAL AQUATIC SITES
OAKLAND TOUCHDOWN
Caltrans District 4
111 Grand Avenue
Oakland, California 94612

San Francisco - Oakland Bay Bridge East
San Seismic Safety Project
IN COUNTIES OF: San Francisco and Alameda
APPLICATION BY: Caltrans District 4
DATE: October 2001



PURPOSE: Provide a seismically upgraded vehicular connection between YBI and Oakland for future users

DATUM: Mean Sea Level NAD 83

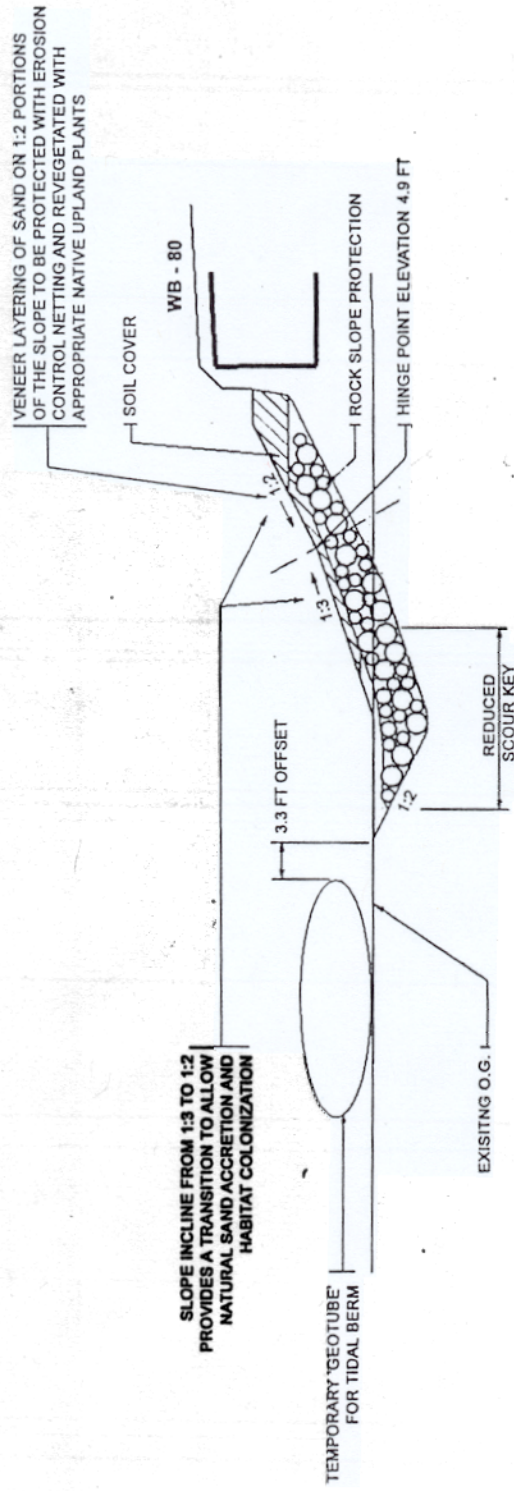
ADJACENT PROPERTY OWNERS:
See Block 11

**San Francisco-Oakland Bay Bridge East
Span Seismic Safety Project**

IN COUNTIES OF: San Francisco and Alameda

APPLICATION BY: Caltrans District 4

DATE: October 2001



PROPOSED SLOPE TREATMENT

PURPOSE:
Provide a seismically upgraded vehicular connection
between YBI and Oakland for future users

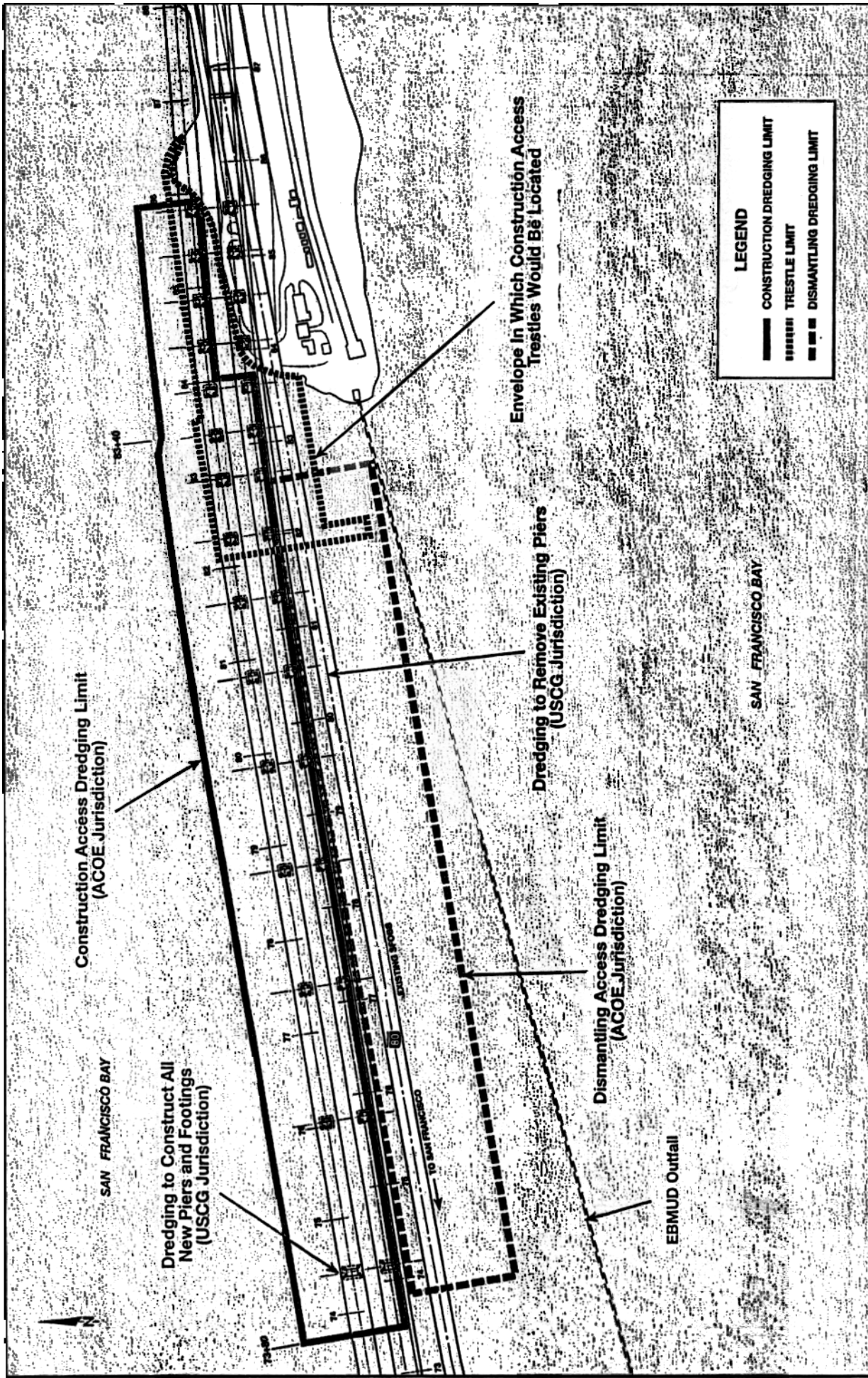
DATUM: Mean Sea Level NAD 83

ADJACENT PROPERTY OWNERS:
See Block 11

PROPOSED SLOPE TREATMENT OAKLAND TOUCHDOWN AREA

Caltrans District 4
111 Grand Avenue
Oakland, California 94612

San Francisco-Oakland Bay Bridge East
Span Seismic Safety Project
IN COUNTIES OF: San Francisco and Alameda
APPLICATION BY: Caltrans District 4
DATE: December 2000

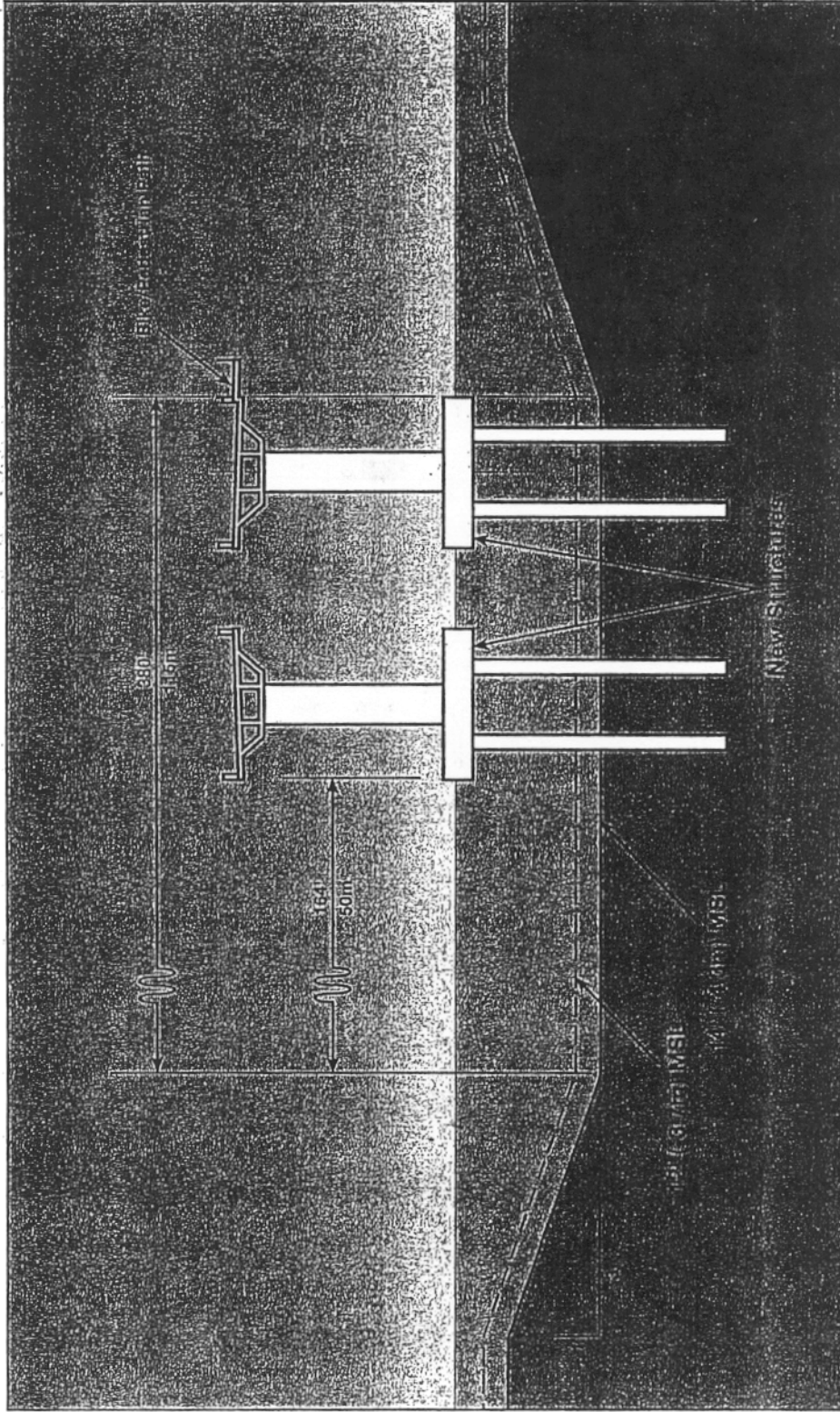


Proposed San Francisco-Oakland Bay Bridge East Span Replacement
 Name of Applicant - Caltrans
 Waterway - San Francisco Bay
 SF PM 7.8-8.7, Alam. PM 0.0-1.3
 SF KP 12.2-14.3, Alam. KP 0.0-2.1
 Location - San Francisco, San Francisco County, CA
 Oakland, Alameda County, CA
 October 2001

Dredging Limits for Construction and Dismantling Access

GRAPHIC SCALE 1:8,000
 0 50 100 150 m

**SFOBB EAST SPAN
 SEISMIC SAFETY
 PROJECT**

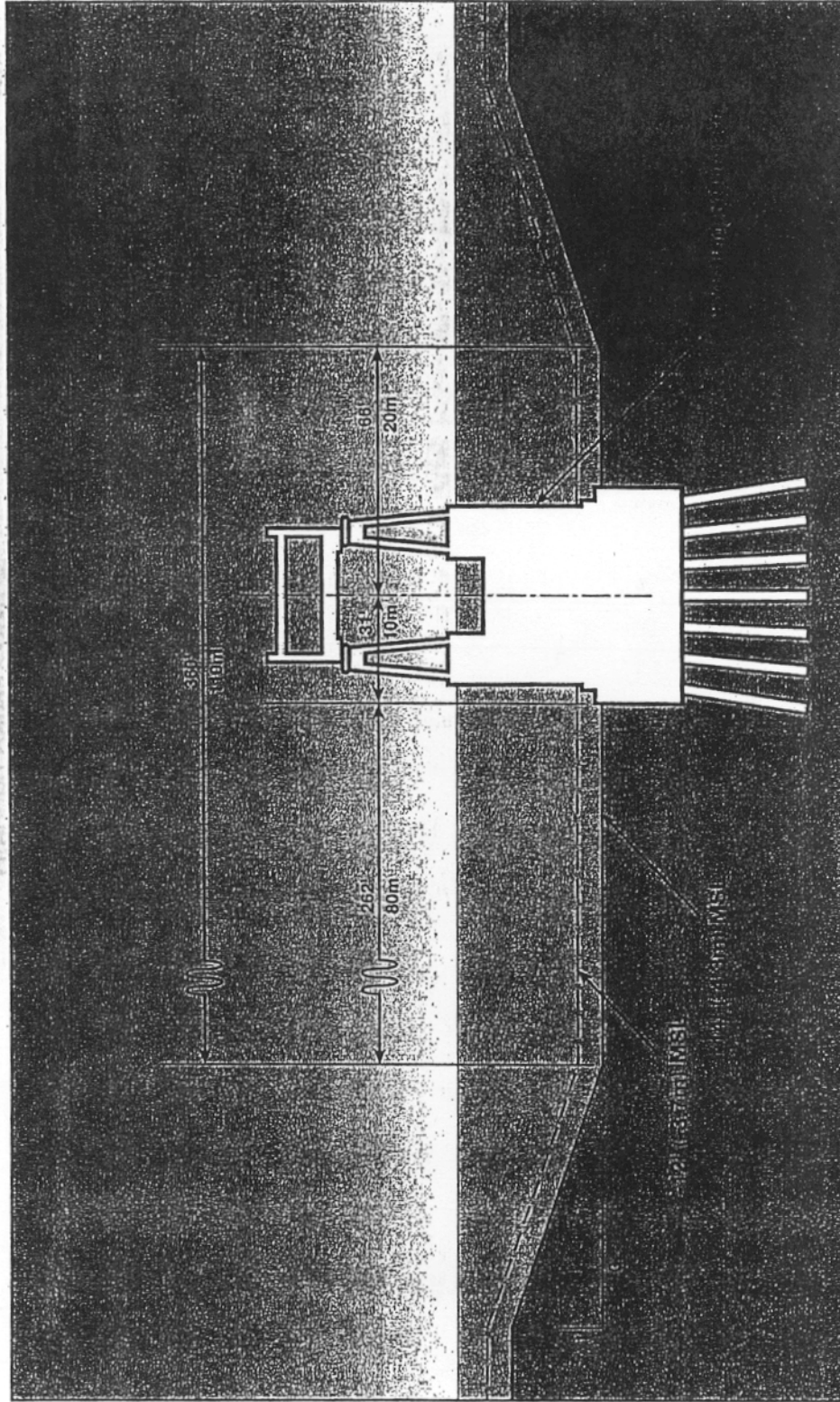


View: Looking East, North Side of Replacement Alternative N-6

Proposed San Francisco-Oakland Bay Bridge East Span Replacement
 Name of Applicant - Caltrans
 Waterway - San Francisco Bay
 SF PM 7.6-8.7, Alam. PM 0.0-1.3
 SF KP 12.2-14.3, Alam. KP 0.0-2.1
 Location - San Francisco, San Francisco County, CA
 Oakland, Alameda County, CA
 May 2001

Dredged Construction Channel Cross-Section

NOT TO SCALE



View: Looking West, South Side of Existing SFOBB

Proposed San Francisco-Oakland Bay Bridge East Span Replacement
 Name of Applicant - Caltrans
 Name of Agency - San Francisco Bay
 District - SF PM 7.8-4.1, Alameda PM 0.0-1.3
 SF KP 12.2-14.3, Alameda KP 0.0-2.1
 Location - San Francisco, San Francisco County, CA
 Oakland, Alameda County, CA
 May 2001

Dredged Dismantling Channel Cross-Section

NOT TO SCALE

SFOBB
EAST SPAN
SEISMIC SAFETY
PROJECT

SCOW CERTIFICATION CHECKLIST

| Checklist Item | Record Data <i>To be filled out and signed within 1 hour of departure time in No.3.</i> | Initials | |
|--|--|-----------------|----------------|
| | | Contr- actor | Insp- ector |
| 1. Ocean Disposal Trip Number: | | | |
| 2. Departure date to SF DODS: | | | |
| 3. Departure time to SF DODS: | | | |
| 4. Departure location (dredge, berth, etc.): | | | |
| 5. Scow name: | | | |
| 6. 80% Scow bin capacity [Cubic Meters]: | | | |
| 7. Tug name: | | | |
| 8. Tug Captain's name: | | | |
| 9. Area/Reach/Berth: | | | |
| 10. Bin Cubic Meters hauled: | | | |
| 11. Does the smoothed dredged material load line (including water) exceed the 80% bin capacity line ¹ : | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| 12. Scow fore draft avg./aft draft avg.: | | | |
| 13. Average draft ² : | | | |
| 14. A-B Line (not to be exceeded): | | | |
| 15. Bin freeboard of material and/or water surface ³ : | | | |
| 16. NWS Coastal Marine Forecast ⁴ Pigeon Point to Pt. Arena (out to 60 nm) (report wind, swell, and RMS wave heights ⁵) Use forecasted wave data to cover the transit route and for the anticipated duration of the transit to SF-DODS (or not less than 12 hrs.) Write-in appropriate forecast periods (ie. Today, Tonight, Tomorrow) | Date/Time of Report: _____ Swell wave height: _____ Wind wave height: _____ RMS wave height: _____ Swell wave height: _____ Wind wave height: _____ RMS wave height: _____ Swell wave height: _____ Wind wave height: _____ RMS wave height: Comments: | | |
| 17. NMS Off-shore Waters Forecast ⁴ California Coast 60 nm - 250 nm offshore Pt. Arena to Pt. Conception Write-in appropriate forecast periods | Date/Time of Report: _____ Seas: _____ Winds: _____ Seas: _____ Winds: _____ Seas: _____ Winds: | | |
| 18. NWS Buoy Report ⁶ SF Buoy (46026): | Time of Report: Wave height: Wave period: | | |

SCOW CERTIFICATION CHECKLIST

| Checklist Item | Record Data <i>To be filled out and signed within 1 hour of departure time in No.3.</i> | Initials | |
|---|--|-------------|------------|
| | | Contr-actor | Insp-ector |
| 19. NWS Buoy Report ⁶ Point Arena Buoy (46014): | Time of Report: Wave height: Wave period: | | |
| 20. Based on the wave period at SF Buoy of Item 18, and the RMS wave heights ⁶ of Item 16 above, check-off items 20A through 20D Yes or No: | | | |
| <u>Waves and Periods:</u> | | | |
| A. 3 meters or less, any period: | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| B. Greater than 3 meters and less than 5 meters, with a period of 9 sec. or more: | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| C. Greater than 3 meters and less than 5 meters, with a period less than 9 sec.: | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| D. Greater than 5 meters with any period: | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| 21. Scow DDLS functioning: | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| 22. EPS functioning on tug: | Yes <input type="checkbox"/> No <input type="checkbox"/> | | |
| 23. Comments: | | | |
| | | | |
| 24. Contractor's Signature: | Print Name: | Time/Date: | |
| 25. Inspector's Signature: | Print Name: | Time/Date: | |
| 26. The decision to proceed to the ocean disposal site, based upon all available data including the recordings and calculations on this form, is also subject to the professional judgement of the Tug Captain as to the safety of the crew and vessel. | | | |
| Tug Captain's Signature: | | Print Name: | Time/Date: |

¹If scow haul of dredged material and water, as verified by observation of the bin material & waterline, exceeds the 80% bin limit line as painted in the bin, then scow is not within specifications.

²If average draft exceeds the A-B Line limit (Item No. 14), then scow is not within specifications.

³Scows must be loaded to avoid risk of spillage under the expected sea state conditions. Federal law prohibits any spillage of material during transit to the SF-DODS - violations may result in fines and prosecution.

⁴Use the most recent NWS Coastal Marine Forecast and Offshore Waters Forecast. Contractor may use either radio (VHF WX) data, Navtex printout or internet data, but once a primary source is selected for the duration of the project and approved, an alternate method may only be used as a approved backup when the approved primary source is unavailable. Inspectors are required to retain hardcopy Navtex output of NWS forecasts for end-of-year reporting. If internet data is utilized, the following websites are authorized: Coastal Marine Forecast (<http://nimbo.wrh.noaa.gov/Monterey/SFOCWFSFO.html>), Offshore 60 NM Forecast (<http://nimbo.wrh.noaa.gov/Monterey/NFDOFFPZ6>).

⁵ RMS wave height is the calculated RMS sum of the predicted swell and wind wave heights, which is equal to the square root of the sum of the squares of the swell wave and wind wave heights as follows: $\sqrt{((\text{Swell Wave}_{\text{avg}})^2 + (\text{Wind Wave}_{\text{avg}})^2)}$. If a range of predicted swell wave height and/or wind wave height is given, use the average of the given range to calculate the RMS wave height, so long as the maximum value of any range does not exceed 5 meters.

⁶Use most recent NWS buoy report radio broadcast (VHF WX) data.